

Please amend the application as follows.

In the Title:

Please delete the current title and replace it with the following new title:

-- Nucleic Acids Corresponding to TANGO 294, a Gene Encoding a Lipase-Like Protein --

In the Claims:

Please amend claims 1, 2, 12, 29-33, 35-38, and 40 to read as follows. For the Examiner's convenience a "Marked-Up Copy of Claims Amended " accompanies this Amendment. In that document, text which has been added to the claim is underlined, and text which has been deleted from the claims is ~~struck through~~. The Applicants have also enclosed a "Clean Copy of Claims, as Amended," in which all claims that would be pending after entry of a formal counterpart of this Draft Amendment are listed in an order which the Applicants believe is appropriate for issue.

Please amend claims 1, 2, 12, 29-33, 35-38, and 40 to read as follows.

1. (Thrice Amended) An isolated nucleic acid molecule that encodes a polypeptide which exhibits lipase activity, wherein the isolated nucleic acid molecule is selected from the group consisting of:

a) a nucleic acid molecule having a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof;

b) a nucleic acid molecule comprising at least 100 nucleotide residues and having a nucleotide sequence identical to at least 100 consecutive nucleotide residues of SEQ ID NO: 45 or 46, or a complement thereof;

c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence encoded by SEQ ID NO: 46;

d) a nucleic acid molecule which encodes at least 20 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46; and

e) a nucleic acid molecule which encodes a variant of the amino acid sequence encoded by SEQ ID NO: 46, wherein the nucleic acid molecule hybridizes in 6× sodium chloride/sodium citrate (SSC) at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46 or a complement thereof.

2. (Twice Amended) The isolated nucleic acid molecule of claim 1, which is selected from the group consisting of:

a) a nucleic acid having the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof; and

b) a nucleic acid molecule which encodes the amino acid sequence encoded by SEQ ID NO: 46.

12. (Thrice Amended) A method for producing a polypeptide that exhibits lipase activity, the method comprising culturing the host cell of claim 5 under conditions in which the nucleic acid molecule is expressed.

29. (Amended) The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule encodes a polypeptide comprising the amino acid sequence encoded by SEQ ID NO: 46.

30. (Twice Amended) The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule encodes a polypeptide comprising at least 20 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46.

31. (Amended) The isolated nucleic acid molecule of claim 30, wherein the nucleic acid molecule encodes a polypeptide comprising at least 25 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46.

32. (Twice Amended) The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule encodes a variant of the amino acid sequence encoded by SEQ ID NO: 46, wherein the nucleic acid molecule hybridizes in 6× SSC at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46 or a complement thereof.

33. (Amended) The isolated nucleic acid molecule of claim 30, wherein the consecutive amino acid residues comprise an immunogenic portion of the protein having the amino acid sequence encoded by SEQ ID NO: 46.

35. (Amended) The method of claim 12, wherein the polypeptide comprises the amino acid sequence encoded by SEQ ID NO: 46.

36. (Amended) The method of claim 12, wherein the polypeptide comprises at least 20 contiguous amino acids of the amino acid sequence encoded by SEQ ID NO: 46.

37. (Twice Amended) The method of claim 12, wherein the polypeptide is a variant of the polypeptide encoded by SEQ ID NO: 46, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes in 6× SSC at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof.

38. (Amended) The method of claim 64, wherein the polypeptide exhibits lipase activity.

40. (Amended) The method of claim 65, wherein the polypeptide exhibits lipase activity.

Please add claims 41-66 as follows.

-- 41. The method of claim 36, wherein the polypeptide is an immunogenic portion of the protein having the amino acid sequence encoded by SEQ ID NO: 46.

42. The method of claim 37, wherein the polypeptide is an immunogenic portion of the protein having the amino acid sequence encoded by SEQ ID NO: 46.

43. An isolated nucleic acid molecule that encodes an immunogenic portion of the protein having the amino acid sequence encoded by SEQ ID NO: 46, the isolated nucleic acid molecule being selected from the group consisting of:

a) a nucleic acid molecule having a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof;

b) a nucleic acid molecule comprising at least 100 nucleotide residues and having a nucleotide sequence identical to at least 100 consecutive nucleotide residues of SEQ ID NO: 45 or 46, or a complement thereof;

c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence encoded by SEQ ID NO: 46;

d) a nucleic acid molecule which encodes at least 20 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46; and

e) a nucleic acid molecule which encodes a variant of the amino acid sequence encoded by SEQ ID NO: 46, wherein the nucleic acid molecule hybridizes in 6× sodium chloride/sodium citrate (SSC) at about 45°C, followed by one or more washes in 0.2× SSC,

0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46 or a complement thereof.

44. The isolated nucleic acid molecule of claim 43, wherein the molecule hybridizes in 6× SSC at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46 or a complement thereof.

45. The isolated nucleic acid molecule of claim 43, wherein the nucleic acid molecule has a sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof.

46. The isolated nucleic acid molecule of claim 45, wherein the nucleic acid molecule has a sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof.

47. The isolated nucleic acid molecule of claim 43, wherein the nucleic acid molecule comprises at least 100 nucleotide residues and has a nucleotide sequence identical to at least 100 consecutive nucleotide residues of SEQ ID NO: 45 or 46, or a complement thereof.

48. The isolated nucleic acid molecule of claim 47, wherein the nucleic acid molecule comprises at least 150 nucleotide residues and has a nucleotide sequence identical to at least 150 consecutive nucleotide residues of SEQ ID NO: 45 or 46, or a complement thereof

49. The isolated nucleic acid molecule of claim 48, wherein the nucleic acid molecule comprises at least 500 nucleotide residues and has a nucleotide sequence identical to at least 500 consecutive nucleotide residues of SEQ ID NO: 45 or 46, or a complement thereof

50. The isolated nucleic acid molecule of claim 43, wherein the nucleic acid molecule encodes a polypeptide comprising the amino acid sequence encoded by SEQ ID NO: 46.

51. The isolated nucleic acid molecule of claim 43, wherein the nucleic acid molecule encodes a polypeptide comprising at least 20 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46.

52. The isolated nucleic acid molecule of claim 51, wherein the nucleic acid molecule encodes at least 25 consecutive amino acid residues of the amino acid sequence encoded by SEQ ID NO: 46.

53. The isolated nucleic acid molecule of claim 51, wherein the polypeptide exhibits lipase activity.

54. The isolated nucleic acid molecule of claim 43, wherein the nucleic acid molecule encodes a variant of the amino acid sequence encoded by SEQ ID NO: 46, wherein the nucleic acid molecule hybridizes in 6× SSC at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46 or a complement thereof.

55. The isolated nucleic acid molecule of claim 43, which is selected from the group consisting of:

a) a nucleic acid having the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof; and

b) a nucleic acid molecule which encodes the amino acid sequence encoded by SEQ ID NO: 46.

56. The nucleic acid molecule of claim 43, further comprising vector nucleic acid sequences.

57. The nucleic acid molecule of claim 43, further comprising nucleic acid sequences encoding a heterologous polypeptide.

58. A host cell which contains the nucleic acid molecule of claim 43.

59. The host cell of claim 58 which is a mammalian host cell.

60. The host cell of claim 58, which is a prokaryotic host cell.

61. A non-human mammalian host cell containing the nucleic acid molecule of claim 43.

62. A method for producing an immunogenic portion of the protein having the amino acid sequence encoded by SEQ ID NO: 46, the method comprising culturing the host cell of claim 58 under conditions in which the nucleic acid molecule is expressed.

63. The method of claim 62, wherein the polypeptide comprises the amino acid sequence encoded by SEQ ID NO: 46.

64. The method of claim 62, wherein the polypeptide comprises at least 20 contiguous amino acids of the amino acid sequence encoded by SEQ ID NO: 46.

65. The method of claim 62, wherein the polypeptide is a variant of the polypeptide encoded by SEQ ID NO: 46, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes in 6× SSC at about 45°C, followed by one or more washes in 0.2× SSC, 0.1% SDS at 50°C with a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO: 45 or 46, or a complement thereof.